Thermochimica Acta, 231 (1994) v–vii
Elsevier Science B.V., Amsterdam

CONTENTS

(Abstracted/Indexed in: Curr. Contents: Phys., Chem. Earth Sci.; Eng., Technol. Appl. Sci., Chem. Abstr., PASCAL/CNRS)

REGULAR PAPERS

Theoretical

Empirical equation for estimation of the enthalpies of formation of crystalline solvates containing water, methanol, ethanol, hydrogen peroxide or sulphur dioxide
D. Mehandjiev and N. Yanakiev (Sofia, Bulgaria) 1

Thermodynamics and Calorimetry

On the characteristics of the signal curves of heat flux calorimeters in studies of reaction kinetics. Part 1. A contribution to the desmearing technique
K.-R. Löblich (Barsinghausen, Germany) 7

A new Calvet-type calorimeter for excess enthalpies
H. Huemer, E. Platzer (Graz, Austria) and K. Rehak (Prague, Czech Republic) 21

Standard enthalpy of formation of di-isobutyldithiocarbamate complexes of zinc-group elements and mean M–S bond-dissociation enthalpies
A.G.d. Souza, C.D. Pinheiro, L.C.R.d. Santos and M.L.d.M. Melo (Paraíba, Brazil) 31

Thermokinetic research method for first-order reactions
J.-S. Liu, X.-C. Zeng, A.-M. Tian and Y. Deng (Chengdu, People's Republic of China) 39

Method of obtaining the thermodynamic characteristics of redox behaviour of vat dyes in aqueous media
M.V. Radugin, A.G. Zakharov, V.V. Lebedev and T.N. Lebedeva (Ivanovo, Russian Federation) 49

A computational thermodynamic evaluation of the altitude profiles of $(N_2)_2$, N_2–O_2 and $(O_2)_2$ in the Earth's atmosphere
Z. Slanina, F. Uhlík, W.B. De Almeida and A. Hinchliffe (Manchester, UK) 55

Complexes of 4-aminopyrimidine and 4-hydroxypyrimidine with water: computed relative thermodynamic stabilities
Z. Slanina, A. Leś and L. Adamowicz (Tucson, AZ, USA) 61

Energetic characteristics of solvation in the solutions of polar organic compounds
E.V. Sidorychev, A.G. Zakharov and A.L. Kolov (Ivanovo, Russian Federation) 69

Structure of the melts of the systems MF–M_2SO_4, where M is Li, Na, K
M. Chrenková, V. Daněk and A. Silný (Bratislava, Slovak Republic) 79

High-accuracy thermal analysis of the solid–solid phase transition of lithium sulfate powders
M. Tischler (San Martín, Argentina) 87

Thermodynamic study of the three isomers of iodobenzoic acid
Z.-C. Tan (Dalian, People's Republic of China) and R. Sabbah (Marseille, France) 109

Thermal Analysis

Preparation, thermal, structural and electrical studies of dichlorohexa (anthranilamide) cobalt(II) and dichloro (anthranilamide) copper(II)
J.R. Allan, B. McCloy and A.D. Paton (Edinburgh, UK) 121

Preparation, structural characterisation and thermal analyses studies of the cobalt(II), nickel(II) and copper(II) complexes of benzylmalonic acid
J.R. Allan and J. Dalrymple (Edinburgh, UK) 129

Thermal decomposition of rare earth element complexes with 2,5-dichlorobenzoic acid
W. Brzyska and E. Świta (Lublin, Poland) 135
Thermal decomposition of silver hexacyanoferrates(II) and its analytical application
A. Cygański, J. Krystek and B. Ptaszyński (Łódź, Poland) 143
Chromium(III) compounds with valine and 2-amino benzoic (anthranilic) acid ligands. Thermal decomposition and kinetic study in air and argon atmosphere
M. Czerwiński, B. Kowalczyk and P. Brągiel (Częstochowa, Poland) 151
Antioxidant properties of lignin and its fractions
T. Kasprzycka-Guttman and D. Odzeniak (Warsaw, Poland) 161
Differential thermal analysis (DTA) at high pressures: phase behaviour of pure and gas-saturated liquid crystals up to 270 MPa
R. Krombach and G.M. Schneider (Bochum, Germany) 169
Use of databases in the kinetic analysis of two parallel first-order reactions
L. Reich (Hoboken, NJ, USA) 177
Preparation and thermal decomposition of $Y_2(OH)_5NO_3 \cdot 1.5H_2O$
I. Schildermans, J. Mullens, J. Yperman, D. Franco and L.C. Van Poucke (Diepenbeek, Belgium) 185
Thermal decomposition of α-tetralyl hydroperoxide under non-isothermal conditions, without solvents
N. Shopova and Sl. Ivanov (Sofia, Bulgaria) 193
Polymer melting: heating rate effects on DSC melting peaks
G. Wang and I.R. Harrison (University Park, PA, USA) 203
Miscibility of poly(vinyl chloride) with terpoly(α-methylstyrene–acrylonitrile–methyl methacrylate)
T. Kovačić, B. Barić and I. Klarić (Split, Croatia) 215
Study of a hydride forming system by thermogravimetry. Hydriding characteristics of $LaNi_5$ mixed with nickel powders
M. El Hammioui, L. Belkbir (Rabat, Morocco) and N. Gerard (Dijon, France) 225
Thermal features and behaviour of 4-aminopyridinium salts of planar inorganic metal(II) 1,2-dithiooxalato-*S*,*S*' complexes, with formula $(HC_5H_6N_2)_2[M(S_2C_2O_2)_2] \cdot 2H_2O$ (where M is Ni^{II}, Pd^{II} and Pt^{II})
P. Román, A. Luque, J.I. Beitia and C. Guzmán-Miralles (Bilbao, Spain) 231
Thermal transitions in surfactant-based lyotropic liquid crystals
P.C. Schulz, J.E. Puig (Guadalajara, JAL, Mexico) G. Barreiro and L.A. Torres (Mexico, D.F., Mexico) 239
Thermal behaviour of cyanoethylated cellulose
M.Z. Sefain (Cairo, Egypt), M.M. Naoum (Giza, Egypt), M.H. Fadl and N.A. El-Wakil (Cairo, Egypt) 257
Synthesis and thermal investigations of $K_2M(IO_3)_4 \cdot 2H_2O$ where M^{2+} is Co^{2+}, Ni^{2+}, Zn^{2+}. Part 1.
M. Maneva and D. Rabadjieva (Sofia, Bulgaria) 267
On the interaction between ammonia and SAPO-5
E. Segal, I. Ivanova and E.G. Derouane (Namur, Belgium) 277
Using thermoanalytical data. Part 5. Effect of experimental constraints and data processing on the accuracy of kinetic parameters determined by dynamic thermal analysis
U. Biader Ceipidor (Camerino, Italy), R. Bucci and A.D. Magrí (Rome, Italy) 287

Other Topics

Application of LM modification of a cubic equation of state for vapor–liquid equilibrium calculations of binary mixtures
G.-H. Liu, C.J. Lim and J. Lielmezs (Vancouver, B.C., Canada) 297
Thermal oxidation of indium nitride films
Y. Sawada and A. Hashimoto (Kanagawa, Japan) 307
Determination of thermal conductivities of solids by microcalorimetry
N. Li and R.-Z. Hu (Xian, People's Republic of China) 317

NOTES

Thermal Analysis

Thermal analyses and electrical studies of bis[dicarbonyl(π-cyclopentadienyl)iron(II)]
J.R. Allan and A.D. Paton (Edinburgh, UK) 333

ETA–DTA study of mechanically ground gibbsite
T. Tsuchida (Sapporo, Japan) 337

Author Index 341

Subject Index 343